

Abstract

The invention provides an apparatus for continuously and efficiently treating volume-reduced polystyrene resin in gel state, thereby removing solvent and recovering resin.

A volume-reduced gel-state polystyrene resin is heated in the separation/recovery apparatus under ambient pressure or reduced pressure, for removal of solvent and recovery of resin. The apparatus includes an apparatus main unit 10 having at the top of the unit a solvent-recovering section for continuously recovering evaporated solvent and having at the bottom of the unit a resin-recovering section for recovering the solvent-removed resin; a heating medium flow pipe 20 provided inside the apparatus main unit 10 for allowing flow of a heating medium inside the pipe; a gel-state resin-feeding means 14 for feeding the volume-reduced polystyrene resin in gel state such that the resin is brought into contact with the heating medium flow pipe 20; a resin-holding section 13 provided in the bottom of the apparatus main unit 10 for holding the resin flowed down to the member after contact with the heating medium flow pipe 20; a heating means 25 for heating the resin held in the resin-holding section 13; and a stirring means 26 for stirring the resin contained in the resin-holding section.

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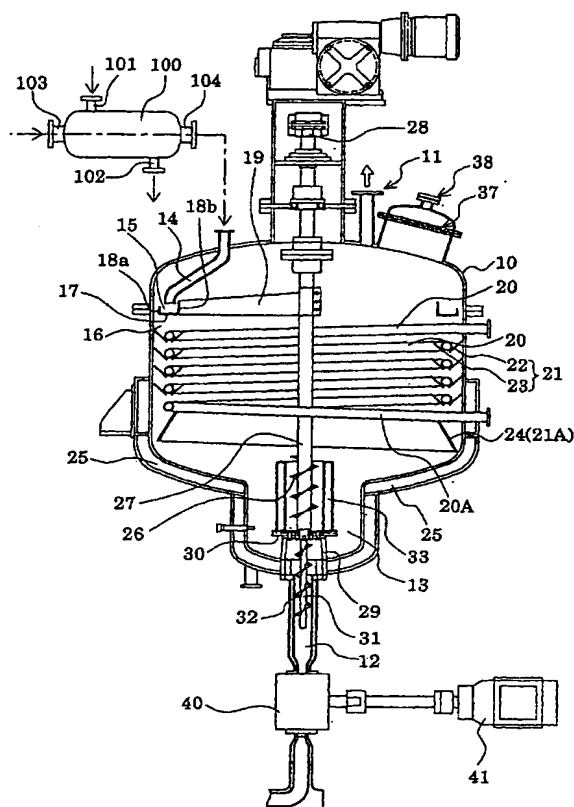
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(54) Title: APPARATUS FOR THE SEPARATION AND RECOVERY OF VOLUME-REDUCED POLYSTYRENE RESIN GEL

(54) 発明の名称: 減容化ゲル状ポリスチレン樹脂分離回収装置



(57) Abstract: The invention provides an apparatus for the separation and recovery of volume-reduced polystyrene resin gel which makes it possible to dispose of a volume-reduced polystyrene resin gel continuously and efficiently and thereby attain the separation and recovery of a solvent and a resin. An apparatus for heating a volume-reduced polystyrene gel under a normal or reduced pressure and thereby conducting the separation and recovery of a solvent and a resin, constituted of a main body (10) which has in the upper part a solvent recovery unit for taking out an evaporated solvent continuously and at the bottom a resin recovery unit for recovering a resin separated from the solvent, pipes (20) which are arranged in the main body (10) and through which a heating medium is made to run, means (14) for introducing a volume-reduced polystyrene resin gel in such a way that the gel comes into contact with the pipes (20), a resin holding section (13) for holding a resin which has come into contact with the pipes (20) and then has run down, means (25) for heating the resin held in the section (13), and means (26) for stirring the resin.

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